

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/001227

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04Q7/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 108 559 A (AASTROEM ET AL) 22 August 2000 (2000-08-22) abstract figure 3 column 3, lines 9-13 column 3, lines 31-37 column 3, lines 48-53 column 3, lines 60-67 column 5, lines 15-41	1-8
X	US 6 654 589 B1 (HAUMONT SERGE) 25 November 2003 (2003-11-25) abstract figure 3 column 4, lines 36-39 column 5, lines 4-8 column 5, lines 51-63	1-8

-/--

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

23 June 2005

Date of mailing of the international search report

01/07/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Mö11, H-P

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/001227

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03/049461 A (INTELLPROP LIMITED; WILSON, JEFFREY) 12 June 2003 (2003-06-12) abstract figures 3,4 claim 1 page 5, line 16 - page 6, line 20	1-8
P, X	EP 1 408 705 A (TELSIS HOLDINGS LIMITED) 14 April 2004 (2004-04-14) abstract paragraph '0024! paragraphs '0027! - '0031! paragraph '0034! paragraphs '0038!, '0039! claim 1	1,2,6-8
A	US 6 101 393 A (ALPEROVICH ET AL) 8 August 2000 (2000-08-08) the whole document	

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6108559	A	22-08-2000	AU 5684498 A BR 9807078 A CA 2277268 A1 WO 9832300 A2 AU 678310 B2 AU 8069594 A CN 1116893 A ,C DE 69431237 D1 DE 69431237 T2 EP 0677232 A1 ES 2180590 T3 FI 953142 A WO 9512292 A1 SG 85057 A1	07-08-1998 18-04-2000 23-07-1998 23-07-1998 22-05-1997 22-05-1995 14-02-1996 02-10-2002 13-03-2003 18-10-1995 16-02-2003 22-06-1995 04-05-1995 19-12-2001
US 6654589	B1	25-11-2003	FI 973806 A AT 268964 T AU 9351598 A CA 2304172 A1 CN 1110171 C DE 69824430 D1 DE 69824430 T2 EP 1018241 A2 ES 2221993 T3 WO 9917499 A2 HK 1031494 A1 JP 2001518744 T TW 429710 B	27-03-1999 15-06-2004 23-04-1999 08-04-1999 28-05-2003 15-07-2004 09-06-2005 12-07-2000 16-01-2005 08-04-1999 31-10-2003 16-10-2001 11-04-2001
WO 03049461	A	12-06-2003	AU 2002356273 A1 EP 1474934 A2 WO 03049461 A2	17-06-2003 10-11-2004 12-06-2003
EP 1408705	A	14-04-2004	AU 2003254717 A1 AU 2003260743 A1 EP 1408705 A1 EP 1540974 A1 WO 2004019634 A1 US 2005101337 A1	29-04-2004 11-03-2004 14-04-2004 15-06-2005 04-03-2004 12-05-2005
US 6101393	A	08-08-2000	AU 1600199 A CA 2311335 A1 WO 9927726 A1	15-06-1999 03-06-1999 03-06-1999

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing
(day/month/year)

29.03.2006

Applicant's or agent's file reference
P021005WO

IMPORTANT NOTIFICATION

International application No.
PCT/GB2005/001227

International filing date (day/month/year)
29.03.2005

Priority date (day/month/year)
29.03.2004

Applicant
INTELLPROP LIMITED et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Vasilakis, S

Tel. +49 89 2399-8554




PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P021005WO	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2005/001227	International filing date (day/month/year) 29.03.2005	Priority date (day/month/year) 29.03.2004	
International Patent Classification (IPC) or national classification and IPC INV. H04Q7/22			
Applicant INTELLPROP LIMITED et al			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of 2 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> <i>(sent to the International Bureau only)</i> a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 27.01.2006		Date of completion of this report 29.03.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Möll, H-P Telephone No. +49 89 2399-8243	



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/GB2005/001227

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-8 as originally filed

Claims, Numbers

1-8 received on 31.01.2006 with letter of 27.01.2006

Drawings, Sheets

1/5-5/5 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2005/001227

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-8
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-8
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Cited Documents

1. Reference is made to the following documents:

D1: US-A-6 108 559
D2: US-A-6 654 589
D3: WO 03/049461 A2

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

A. **Clarity** (Article 6 PCT):

1. **dependent Claims 2 and 5:**

Dependent Claims 2 and 5 lack **clarity** within the meaning of Article 6 PCT for the following reason:

- 1.1 Both dependent **Claims 2 and 5** define that the HLR includes a **settable flag** for controlling the availability of text message processing. Said subject-matter of **Claims 2 and 5** is claimed in combination with that of independent **Claims 1 and 4** which both define that the HLR stores **subscriber specific information** so as to control the availability of text message processing.

Claims 2 and 5 in combination with **Claims 1 and 4** thus convey the impression that two pieces of information are used for controlling the availability of text message processing, namely **subscriber specific information** as well as a **settable flag**.

This is however not supported in the description, where the use of a single field in the HLR subscriber data record, namely the "**class of service field**", is disclosed for this purpose.

- 1.2 It would have been thus necessary to clearly define in said dependent **Claims 2 and 5** that the **subscriber specific information** defined in independent **Claims 1 and 4**

is implemented as a settable flag stored in the HLR in order to overcome the **clarity** objection (Article 6 PCT).

B. **Novelty / Inventive Step** (Article 33 PCT):

1. independent **Claim 1**:

1.1 It is noted that the document **D3** - cited in the application - is regarded as being the closest prior art to the subject-matter of **Claim 1** and shows a "telecommunications service apparatus for use in a mobile telecommunications network" (**D3**, Figs. 3 and 4: "SMS Router"; page 1, line 29 - page 2, line 6; Claim 1) with the following features as defined in **Claim 1** of the present invention:

- processing means for processing received text messages (**D3**, Claim 1; page 6, lines 14-20)
 - call routing means operable to receive a routing information request signal indicative of a text message intended for a mobile terminal (**D3**, Claim 1; page 5, lines 19-28; Fig.3)
 - call routing means operable to return a routing information response signal indicative of the telecommunications service apparatus instead of being indicative of the intended mobile terminal (**D3**, Claim 1; page 5, lines 28-32; Fig.3)
- 1.2 The telecommunications service apparatus defined in present **Claim 1** appears to differ from the disclosure of document **D3** only in that **D3** does not explicitly show that the call routing means is operable to control the availability of processing of the text message based on subscriber specific information [1] and that this subscriber specific information is stored in a HLR of the network [2].

1.3 It would be clear to the person skilled in the art that the telecommunications service apparatus known from **D3** suffers from the drawback that the text message **diversion and processing** functions can not be selectively offered to subscribers. From the disclosure of document **D3** it appears that **either all or none** of the routing information request signals are "intercepted" and **diverted** for subsequent

processing by the telecommunications service apparatus.

- 1.4 In consulting the prior art, the skilled person would come across documents **D1** and/or **D2**, which both disclose a similar technique for **diversion and processing** of mobile terminated short text messages.

Both documents **D1** and **D2** explicitly disclose to selectively activate said **diversion and processing** function for mobile terminated short messages by consulting subscriber specific information ("marked subscribers/flagged subscribers") stored in the HLR of the subscriber. Reference is made to **D1**, *col.5, lines 24-30* and **D2**, *col.5, lines 4-8*. Both documents **D1** and **D2** thus disclose features [1] and [2] of independent **Claim 1** as identified above under item 1.2.

- 1.5 To a skilled person, therefore, starting from the telecommunications service apparatus defined by **D3** and being aware of the disclosure of **D1** or **D2**, it would be obvious to apply the approach described in **D1** or **D2** to the telecommunications service apparatus of **D3**, in order to allow subscriber selective activation of the **diversion and processing** function and he would thus arrive at a telecommunications service apparatus corresponding to the subject-matter of **Claim 1**.

The subject-matter of **Claim 1** therefore lacks an **inventive step** within the meaning of Article 33(3) PCT.

- 1.6 It is in addition noted that documents **D1** and **D2** do no longer prejudice **novelty** (Article 33(2) PCT) of independent **Claim 1**, since **Claim 1** explicitly defines that the **diversion function**, the **control of availability of the processing function** as well as the **processing function** are all carried out by the same entity, namely by the telecommunications service apparatus.

In documents **D1** and **D2** it is the HLR which carries out the **diversion function** and it is a different entity (**D1**: "SMSC-B"; **D2**: "Legal Interception Node-LIN") to which the text message is sent for further **processing**.

Independent **Claim 1** is thus **novel** vis-à-vis both documents **D1** and **D2** (Article 33(2) PCT).

2. dependent **Claims 2 and 3**:

2.1 The additional features of dependent **Claims 2 and 3** do not add anything of **inventive significance** (Article 33(3) PCT) to those claims to which they are appended, as they refer only to minor implementing details which are disclosed in or obviously derivable from the cited prior art references **D1**, **D2** or **D3** or fall within the general knowledge of a person skilled in the art:

(a) **Claim 2**:

D1, col.5, lines 24-30

D2, col.5, lines 4-8

(b) **Claim 3**:

D3, page 6, lines 17-20

D1, col.3, lines 31-37 and 48-53; "... media conversion, ... copying and distribution ..."

D2, col. 5, lines 57-59; "... a short message SM is sent to the LIN which forwards it to the SGSN and sends a copy thereof to the LEA ..."; Fig.3: "step 3-9"

2.2 The dependent **Claims 2 and 3** do thus not meet the requirements of Article 33(3) PCT.

3. independent **Claim 4** and dependent **Claims 5 and 6**:

3.1 The features of independent **Claim 4** and dependent **Claims 5 and 6** ("telecommunications services method") correspond to the features of independent **Claim 1** and dependent **Claims 2 and 3** ("telecommunications service apparatus").

3.2 The arguments concerning **novelty** (Article 33(2) PCT) and **inventive step** (Article 33(3) PCT) as set out above regarding **Claims 1-3** therefore equally apply to said **Claims 4-6** respectively, which do thus also not meet the requirements of Article 33(3) PCT.

4. re **Claims 7 and 8**:

- 4.1 The features of independent **Claims 7 and 8** ("computer program" and "computer program product") correspond to the features of independent **Claims 4-6** ("method"). Independent **Claims 7 and 8** do not provide any additional technical features. The arguments concerning **novelty** (Article 33(2) PCT) and **inventive step** (Article 33(3) PCT) as set out above regarding **Claims 4-6** therefore equally apply to said **Claims 7 and 8**, which do thus also not meet the requirements of Article 33(3) PCT.

C. Further Deficiencies / Defects:

1. The independent claims are not draft in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art document **D3** being placed in a preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).
2. Contrary to the requirements of Rule 5.1.(a) (ii) PCT, the relevant background art disclosed in the documents **D1** and **D2** noted above is not mentioned in the description, nor are these documents identified therein.
3. The opening part of the description has not been brought into agreement with the wording of the Claims (Rule 5.1 (a) (iii) PCT).

CLAIMS

1. A telecommunications services apparatus for use in a mobile telecommunications network, the apparatus comprising:
- 5 processing means for processing received text messages; and
call routing means operable:
to receive a routing information request signal indicative of a text message intended for a mobile terminal;
to return a routing information response signal indicative of the
10 telecommunications services apparatus instead of being indicative of the intended mobile terminal; and
to control availability of processing of the text message based on subscriber specific information;
wherein the network includes a home location register storing said subscriber
15 specific information so as to control the availability of text message processing.
2. Apparatus according to claim 1, wherein the home location register includes a settable flag for controlling the availability of the text message processing.
- 20 3. Apparatus according to claim 1 or claim 2, wherein the text message processing includes copying and/or diversion of the text message, interception of the text message, providing location privacy, anti-spam protection, access to diverted messages, and/or access to messages from other messaging systems.
- 25 4. A telecommunications services method for a mobile telecommunications network, the method comprising:
receiving in a telecommunications services apparatus a routing information request signal indicative of a text message intended for a mobile terminal;
returning a routing information response signal indicative of the
30 telecommunications services apparatus instead of being indicative of the intended mobile terminal; and

controlling availability of processing of the text message based on subscriber specific information;

wherein the network includes a home location register storing said subscriber specific information so as to control the availability of text message processing.

5

5. A method according to claim 4, wherein the home location register includes a settable flag for controlling the availability of the text message processing.

6. A method according to claim 4 or claim 5, wherein the text message processing
10 includes copying and/or diversion of the text message, interception of the text message, providing location privacy, anti-spam protection, access to diverted messages, and/or access to messages from other messaging systems.

7. A computer program having computer executable instructions, which when
15 loaded on to a computer is operable to cause the computer to perform the method according to any one of claims 4 to 6.

8. A computer program product having a computer readable medium having
20 recorded thereon information signals representative of the computer program according to claim 7.